

INTESTINAL OBSTRUCTION FROM STRANGULATION BY AN ADHESION BAND ; RECOVERY AFTER LAPAROTOMY.¹

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THE patient, Mollie R., first came under notice at the Bay View Asylum December 2, 1893, suffering with vomiting and colicky abdominal pains, slight pyrexia, no abdominal tenderness. A history of excess in diet the day previous was elicited and the attack attributed to that cause. Gastric sedatives and a purge were ordered, with no beneficial effects. The symptoms continued during the following day, to which was added some abdominal tenderness on pressure in the epigastric region. The vomited matter was a greenish bile-stained material, not stercoraceous. An enema was ordered, producing a small stool, and the vomiting was controlled by hydrocyanic acid and bicarbonate of soda. The patient improved during the next day, but the symptoms reappeared on December 5. The pain now became continuous, tenderness on pressure, especially marked in right iliac region and over McBurney's spot; the bowels markedly tympanitic, the abdomen distended, the vomit stercoraceous. A rapid and feeble pulse, intense thirst, face pallid and anxious, temperature slightly above normal, gave indications that the patient was reaching a state of collapse. A large dose of magnesium sulphate produced no effect, nor did turpentine stoups relieve the tympanites; nothing was made out by rectal and vaginal examinations. The marked distention of the abdomen due to extreme tympanites, the great tenderness over it, together with the slight elevation of temperature and the rapid pulse, taken in connection with the history of the case, made the diagnosis of intestinal obstruction very probable, and it was decided to operate

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at once. After the usual preparations, an incision about three inches long was made in the median line between the umbilicus and pubes. After opening the peritoneal cavity, the inguinal and femoral rings were rapidly examined, and then the right inguinal region was searched. Here a band was found, holding down a loop of the ileum which was tightly constricted. The band was broken by the finger, and the gut released. At the points where it was grasped it was found to be narrowed to about one-half its usual size. The peritoneal covering of the gut was abraded at these points of pressure, but there was no indication of gangrene. The lowest constriction was about four inches from the ileo-cæcal valve, and the higher one was two inches farther up. The intestines above the band were fiery red, and greatly distended with gaseous and fluid contents; below, they were pale and collapsed. As soon as the band was broken the over-distended small bowels began to empty into the large, and the gurgling of the gas could be distinctly heard as it passed the ileo-cæcal valve. The band extended from the outer and upper part of the broad ligament to the cæcal region, and was evidently due to old inflammatory adhesions. One or two other small bands were found and broken up at the same time. The abdominal cavity was flushed and the wound closed with silkworm-gut sutures. The patient made an uneventful recovery. She had a large stool shortly after the operation, and complained principally of the strict diet enforced for the first few days. The patient had been sick for twenty-four hours before she came under observation, so that the obstruction had lasted for over four days before the operation.

The diagnosis of intestinal obstruction can usually be made with very great certainty, but the nature of the obstruction can be ascertained with much greater difficulty. Fortunately this is in most cases (after excluding those that can be relieved without operation) of little importance. The earlier symptoms are colicky pains which may be localized at the point of obstruction, or may be referred to the umbilicus. Not infrequently a tumefaction at point of lesion can be felt, and this may be very tender. Rapid distention of the intestines above the seat of injury, which at first is more *marked on the side of the lesion*, and in thin walled abdomens the distended loops of intestines may be made out.¹

¹ Von Wahl, Centralblatt für Chirurgie, 1889.

Hence, vomiting comes on early, is persistent, and later becomes stercoraceous. Symptoms of peritonitis and sepsis are present during the last stage of the disease, if relief is not secured. Indican urine is said by Rozenbush¹ to be present in all cases after the first twenty-four hours, unless the obstruction is very high up near the stomach. This was well marked in a case of rectal impaction recently in the case of Dr. Julius Friedenwald and myself. Dr. Friedenwald examined the urine and found that the reaction disappeared about twenty-four hours after the impaction was relieved.

Treatment.—Prompt action in cases where the symptoms point to obstruction is imperative. The ordinary means of relief should be applied at once, and if they are not successful, a laparotomy should be done. Purgatives should be given if faecal impaction is suspected, and the injection of large quantities of warm water with salts and glycerin, by hydrostatic pressure, slowly done, will usually give prompt return in such cases. This will also probably sometimes reduce a recent intussusception or twist of the bowel. Massage, with change of position, will assist in such cases. These measures are comparatively safe in the earlier stages, but may become dangerous after the bowel is weakened by inflammation or gangrene, or after adhesions have formed. If they are not successful, laparotomy should be resorted to during the first twenty-four hours if possible.

The dangers of delay are due to changes that take place in bowels and peritoneum from inflammation or pressure and to the absorption of their contents, producing septic intoxication together with the exhaustion of the patient from vomiting, etc. There can be no doubt that a large number of those operated on and who die would get well if the operation were done earlier. One reason for the usual delay in these cases is the difficulty of getting the consent of the patient and the family.

This can often be overcome by determined effort, and with improved results will gradually disappear to a great extent. I think that when an operation is refused until the patient is in a hopeless state it should not be done, as it will discredit both the

¹ Berliner klinische Wochenschrift, November 1, 1889.

surgeon and the operation and deter others from seeking relief at the proper time.

The use of opium, which masks the symptoms, giving a false sense of security, while gangrene or toxæmia are gradually coming on, cannot be too strongly condemned. The same objection can be made to washing out the stomach, but this should be done before or at the time of operation, as it will lessen the subsequent vomiting, as well as the danger of ptomaine absorption.

In conclusion, allow me to call attention to some points of special interest in connection with this case,—

(1) The successful termination after symptoms lasting over four days. This was no doubt due to the fact that the constriction was not tight enough to destroy the circulation of the blood, and probably did not, at first, prevent the passage of part of the contents of the bowel.

(2) It illustrates the advantage of examining the points of probable localization, instead of following the distended gut. If we succeed in finding the trouble in this way much time and unnecessary handling of bowels is saved. In the case reported the trouble was localized almost immediately, and the operation, including sutures and dressing, was completed in less than thirty minutes.

(3) The nature of the obstruction by inflammatory bands. These are not infrequently the cause, and the prognosis is very good in such cases, except when the operation has been delayed until gangrene has supervened or the patient has absorbed a fatal dose of ptomaines.

Cases due to similar causes have recently been reported by Alexander MacCormick,¹ two cases successfully operated on; G. A. Wright,² one successful case; Bryant,³ an unsuccessful case; A. Broca,⁴ one case with perfect recovery; R. M. Williams and J. R. Lunn,⁵ one case with death after abdominal section.

¹ Australasian Medical Gazette, June 15, 1893.

² Lancet, July 16, 1893.

³ New York Medical Journal, July 25, 1893.

⁴ Bulletin de la Société anatomique, Paris, July 7, 1893.

⁵ Lancet, January 23, 1893.